Revised March 3, 1999 FAA-04-19203-3 298060

Aircraft Certification Service

Transport Airplane Directorate "Short" Domestic Worksheet 2004-NM-109-AD

DOCKET NUMBER:

Frequency Converter No Output Short Circuit Protection TECH WRITER:

ASP Board 11/21/01

Manufacturer's Service Information/Revision/Date (Attach 2 clean copies):

PROPOSED CORRESPONDING ACTION:

RECEIVED
MAY 19 2004
ANM-114

	Emergency AD	*Is this action one of the following?*	
	Immediately Adopted AD		**Supersedure of AD**
X	**Notice of Proposed Rulemaking**		**Revision of AD (Docket No. TBD)**
	Final rule after NPRM *(If FRAN, complete Attachment A.)*		**Supplemental NPRM (Docket No. TBD)** *(If any of the above is checked, complete Attachment B.)*
	Other (No-Notice Final Rule)		

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Backup Engineer: **Telephone:**

***1. Model, Applicability, # Airplanes (both U.S. & worldwide)** - Refer to SB; state any differences for this AD:*

Model: 757-200
Applicability: See Boeing Service Bulletin 757-25-0255, Revision 0, dated December 11, 2003
Concurrent 757-24-0093 - 8/14/03

U.S. airplanes: 4 # worldwide airplanes: 4
Source:

AD Summary and Discussion Sections:

2. What has the manufacturer told the FAA? ***"The FAA has received reports indicating that..."***
Describe background/events that prompted the AD in 1-2 sentences. Refer to SB 'Reason.'

Boeing analysis has shown that a hard short condition between the output of frequency converter and its downstream circuit breaker will produce a continuous current of 55 amps, causing the undersized output wiring to exceed its wire temperature rating of 150 degree C

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

3a. What is the unsafe condition AND its cause? ***"These actions are intended to prevent..."***
Describe unsafe condition and its cause in 2-3 sentences (non-technical terms). Refer to SB 'Reason.'

Frequency Converter has no output short circuit protection, may cause overheat condition.

3b. What is the end-level effect on the airplane? ***"...which could result in..."***
Provide a 1-sentence description; use non-technical terms.

If the output of Frequency Converters is shorted, it will overheat, potential causing a wire bundle failure. The bundle failure may affect other systems sharing the impacted bundle.

AD Relevant Service Information Section:

4. (Yes or No) Is the corrective action required in this AD considered to be interim action?

NO

5. (Yes or No) Is this action considered 'sensitive', or is it related to a Safety Recommendation?
(If yes, state why sensitive, and/or provide copy of FAA/NSTB Safety Recommendation.)

NO

6. Does the referenced service document include reference to an "operator's equivalent procedure?"
[If yes, specify whether that procedure employed by the operator (even if not technically 'equivalent') adequately addresses the identified unsafe condition and provides an acceptable level of safety.]

~~NO~~ YES - Acceptable ~~for~~ -

7. AD Differences Section (if needed): ***"This AD differs from the SB ....***

Check if : **Flight with Cracks** ____ **Mandate Terminating Action** ____ **Contact Mgr, FAA** ____
Compliance time **Mandate AFM Action**
____ ____

Describe any other differences between service bulletin and this proposed FAA AD.

None

AD Cost Impact Section:

8a. Work hours for corrective action(s) required: (List hours or reference SB 'Manpower').

105 hours per airplane

8b. Parts Cost, if any: (List costs or reference SB 'Material - Cost and Availability').

$11,000.00 per airplane

9. AD Body Section:

For EACH corrective action, mark up SB, if usable -OR- fill out Corrective Action Table below.

9a: Action # 1

What is the corrective action? Replace three frequency converters part number1-002-0102-0730 with new part number 1-002-0102-2031, install three relay assemblies with power cut-off relays and a thermal switch in closet assembly S3, change the wires with higher permitted temperature. All the above activities to be performed according to Boeing Service Bulletin 757-25-0255, Rev New, dated December 11, 2003. SIB 757-24-0093 must be accomplished prior to or concurrence with this SIB.

What is its compliance time? Within 18 months from the effective date of this AD.

(Add grace period if not available)

What is repetitive interval? N/A

9b: Action # 2

What is the corrective action?

What is its compliance time?

(Add grace period if not available)

What is repetitive interval?

10. (Yes or No) Should corrective action(s) required in this AD to be applied to spares as well?

NO ? Page 22

11. Should a ferry flight permit be: X ***Permitted*** ___ ***Permitted with limitations**** ___ ***Prohibited*** ___

**List limitations.*

12. With whom outside the FAA has this proposal been discussed (i.e. ATA, RAA, ALPA, etc.)?
NOTE: This item should be completed prior to submission of the AD Proposal Worksheet.

Organization	***Person Contacted***	***Date***	***Reaction***
BACG	*David Nguyen*	*11/02*	*Concurrence*
ATA	*Charlie Bautz*	*01/13/04*	*Concurrence*

13. Check the appropriate response:

Yes ___ ***No*** X ***Does this action affect the Presidential fleet?***

Yes ___ ***No*** X ***Does this action affect the FAA fleet?***

Yes ___ ***No*** X ***Was this action prompted by the use of suspected unapproved parts (SUP)?***

14. Check the category that best describes the cause of the unsafe condition addressed by this AD:

X	Design Problem	___	Unapproved Parts	___	Operational
___	Maintenance	___	Quality Control Problem**	___	Other (specify): ___
		___	**Reporting Reqt Needed?		___